

# **Air Resources Activities at ERS**

**USDA Agricultural Air Quality Task Force Meeting  
November 6-7, 2008**

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Economic Research Service**



# ERS Mission

- ERS is the main source of economic information and research from USDA
- ERS brings the perspective of economic analysis to critical issues confronting farmers, agribusiness, consumers, and policymakers

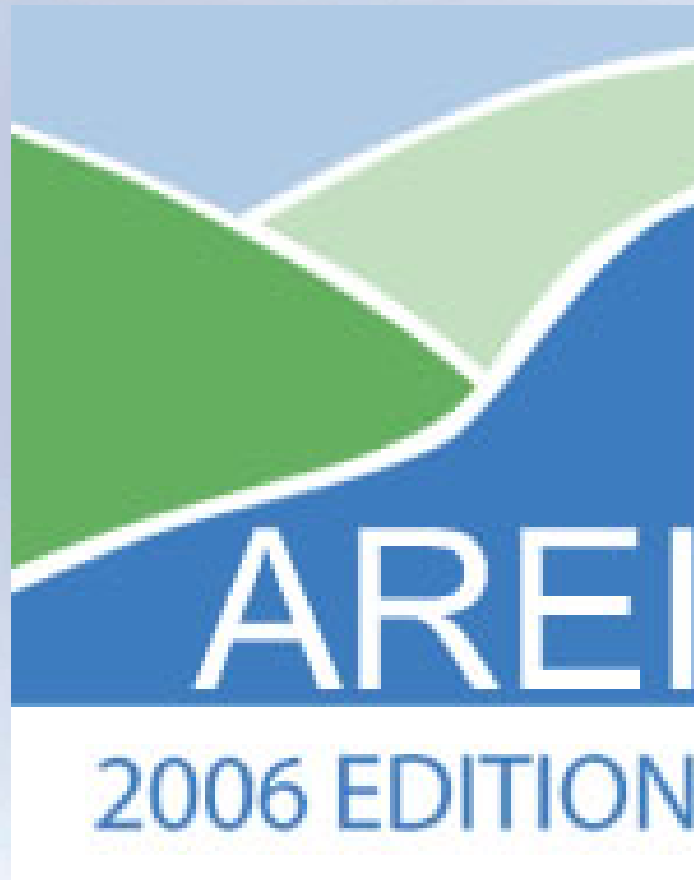


# Air Quality Research

- Report status and trends of indicators related to air quality
- Assess potential impacts on air resources of USDA policies that affect technology choices at the farm and ranch level
- Assess potential impacts to agricultural sector of environmental policies that protect air quality



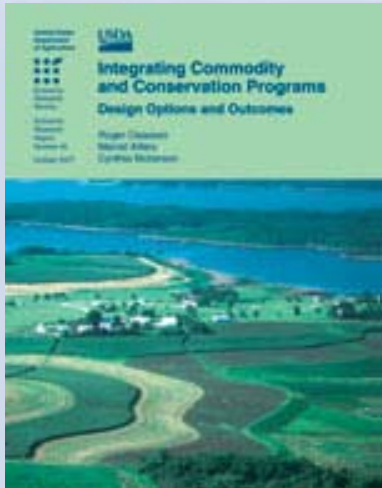
# Agricultural Resources and Environmental Indicators



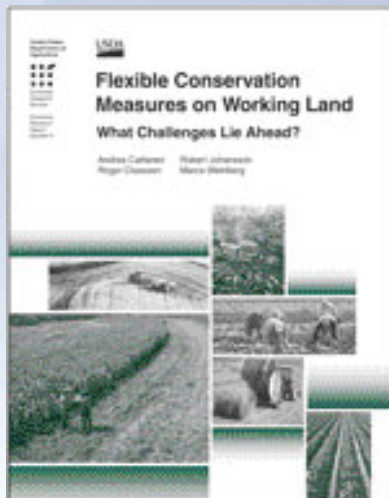
<http://www.ers.usda.gov/publications/arei/eib16/>



# Assess Conservation Program Design



Examines the distributional and environmental implications of a policy that combines income support with payments for conservation.



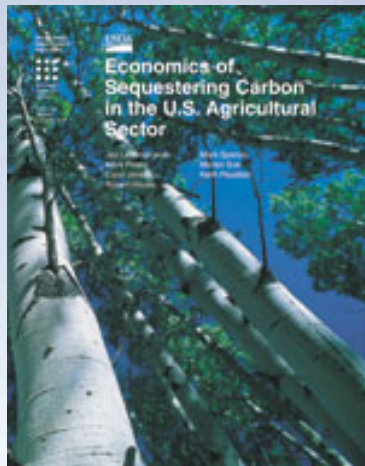
Examines the potential environmental gains and economic adjustments under different working-land payment program designs



# Assess Environmental Policies



Examines the potential environmental and economic tradeoffs if the animal sector were confronted with both air and water quality requirements

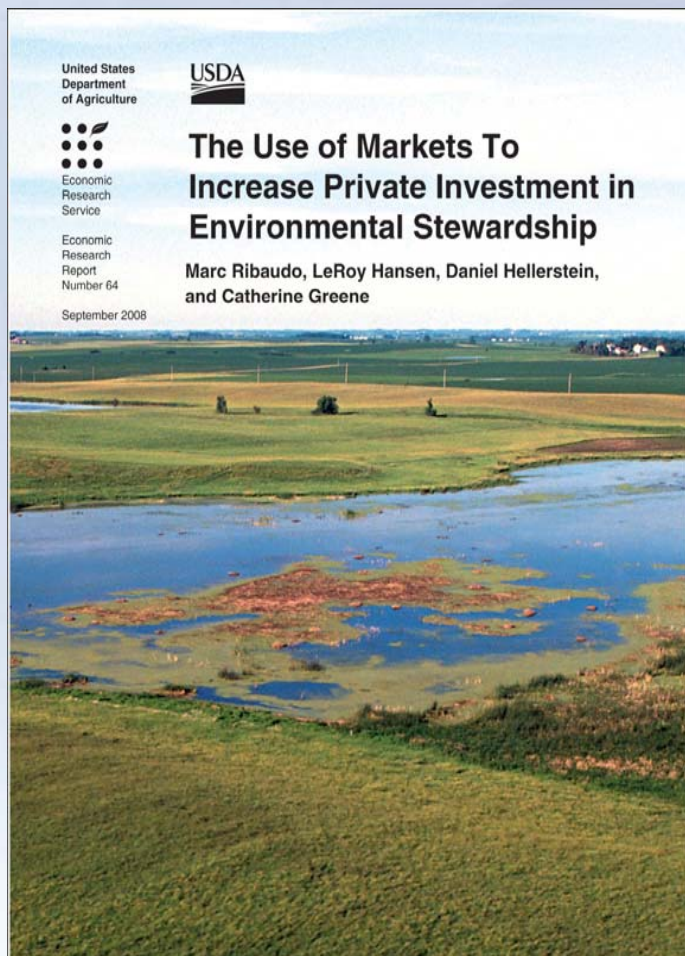


Analyzes the performance of alternative incentive designs and payment levels if farmers were paid to adopt land uses and management practices that raise soil carbon levels.





# Markets for Environmental Services



Assesses the role markets for environmental services can play in providing incentives for conservation on farms. Markets for greenhouse gases is one of the case studies.



# ERS Bioenergy Research Plans

- Implications for domestic and global crop and livestock markets
- Effects of increased bioenergy production on economy, regions, and households
- Impacts of increased bioenergy production on the environment, natural resources, and rural communities

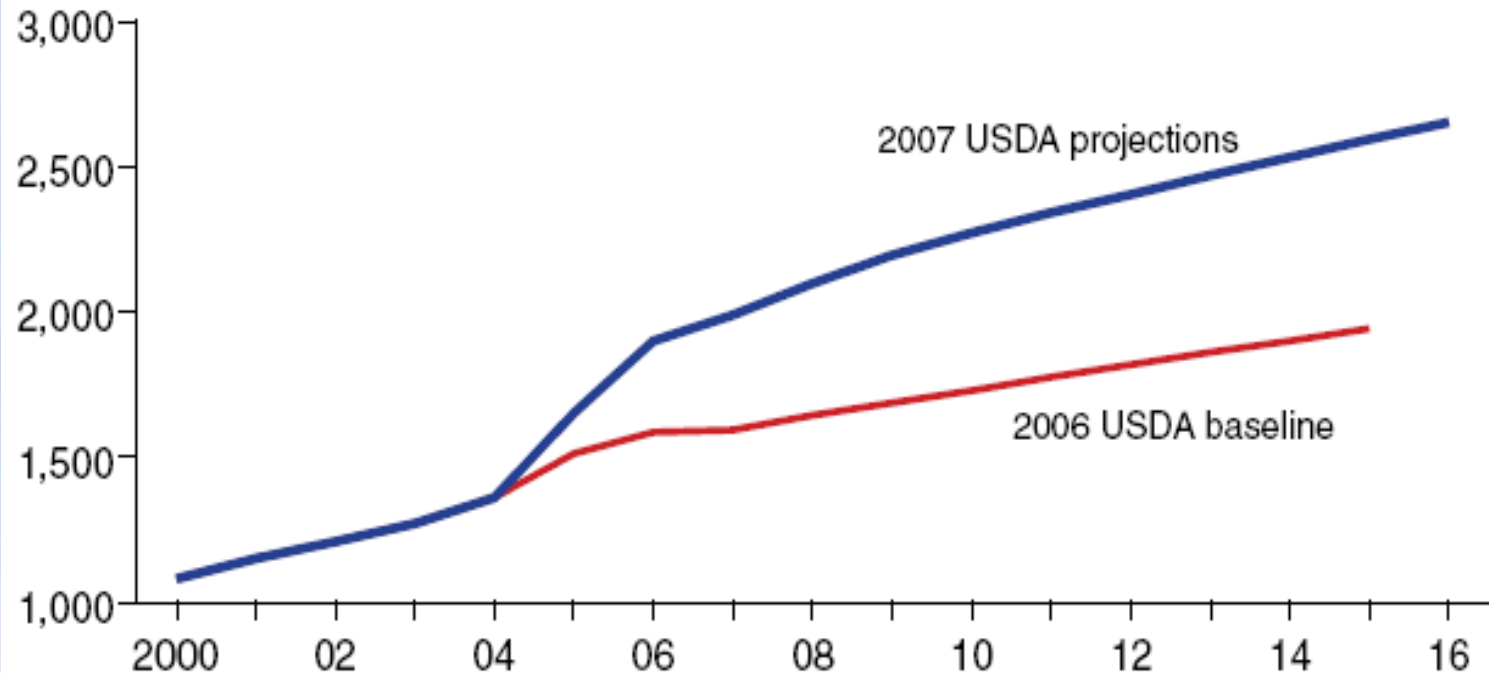




# Research on commodity markets affected by ethanol demand

## Farmland values higher

\$ per acre



Sources: *USDA Agricultural Projections to 2016*, February 2007;  
*USDA Agricultural Baseline Projections to 2015*, February 2006.



# Greenhouse Gas Policy Research (likely)

- Agriculture's role in carbon markets
- Interactions of conservation policy and greenhouse gas policy
- Implications of greenhouse gas policy on farm income, land use decisions, production decisions, and environmental quality



# Nitrogen Study

- Environmental consequences of current use of nitrogen on crops
  - Water
  - Air
- Economic drivers behind nitrogen use
  - Prices
  - Financial incentives
  - Regulations
- Benefits of nitrogen management



# Data Program



ERS, in collaboration with NASS, collects and processes data on production practices, conservation practices, input use, and production costs for major crops in major crop producing states, as well as the financial conditions of farms and farm households

